



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/728,853

12/08/2003

Martin Schadt

08130.0051-01000

9438

22852

7590

12/20/2005

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER
LLP

901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER

CHOWDHURY, TARIFUR RASHID

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 12/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/728,853	Applicant(s) SCHADT ET AL.	
	Examiner Tarifur R. Chowdhury	Art Unit 2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32-46 and 48-59 is/are pending in the application.
 4a) Of the above claim(s) 49-58 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 32-41, 48 and 59 is/are rejected.
- 7) ☒ Claim(s) 42-46 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. This application contains claims 49-58 drawn to an invention nonelected with traverse in reply filed on 01/21/05. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 48 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 48 recites the limitation "the same substrate" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Further, it is not clear whether applicant is claiming an extra linear or circular polarizer being formed on a same substrate with the external polarizer claimed in claim 32 or that both the circular polarizer (claimed in claim 32) and the external linear polarizer are formed in the same substrate. Also, the recitation, "a linear or circular polarizer are arranged on the same substrate" itself is confusing. It is also pointed out to applicant that the newly amended claim 32 already recites, "An element for protection against forgery or copying" and thus the reciting the same in claim 48 which depends on claim 32 is just confusing.

Thus, since it was not clear as to what applicant is trying to claim, for examination purposes it was just assumed that one of the polarizer is formed on a substrate.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any invention s covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 32-35, 48 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schadt.

8. Schadt discloses and shows in Fig. 3, an optical component comprising at least two layers, one layer being a structured retarder (9) and the other layer being a polarizer (8), wherein the retarder (9) has at least two regions with different optical axes and comprises an anisotropic layer comprising cross-linked liquid crystal monomers

Art Unit: 2871

(col. 8, lines 3-19). Schadt also discloses the linear polarizer (8) can be replaced by circular polarizers (col. 8, lines 32-36).

Schadt also shows in Fig. 3, an external linear polarizer (4). Further, Schadt discloses a structure that is similar to the claimed invention and thus as to using the external polarizer to analyze encoded information and the optical element as an element for protection against forgery or copying and using the external polarizer for analyzing encoded information is considered as intended use and thus would have been obvious.

Accordingly, claims 32-35 and 59 would have been obvious.

9. Claims 36-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schadt in view of Kameyama et al., (Kameyama), JP 09-304770. 7.

Schadt differs from the claimed invention because he does not explicitly disclose that two circular polarizers made of cholesteric layer are arranged one above the other, one of which rotates to the left and the other of which rotates to the right.

Kameyama discloses an optical element that uses a separation layer for circular polarized light. Kameyama also discloses that laminating plural cholesteric layers having different reflection wavelengths produces the separation layer and as for the cholesteric layers, a proper material which separates natural light into right-hand and left-hand circular polarized light as transmitted light and reflected light can be used. Kameyama further discloses that these cholesteric layers are laminated to obtain a wider wavelength range for the separation function (abstract).

Kameyama is evidence that ordinary workers in the art would find a reason,

suggestion or motivation to use circular polarizers made of cholesteric layers.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the optical component of Schadt by arranging two circular polarizers made of cholesteric layers one above the other, one of which rotates to the left and the other of which rotates to the right for advantages such as to obtain a wider wavelength range.

Accordingly, claims 36-39 would have been obvious.

As to claims 40 and 41, Schadt also shows in Fig. 3, that the optical component further comprising a linear polarizer (4).

Allowable Subject Matter

10. Claim 42-46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

11. Applicant's arguments regarding Schadt fails to anticipate the claim 32 have been considered but are moot in view of the new ground(s) of rejection.

5. Applicant's arguments filed on 10/14/05 have been fully considered but they are not persuasive.

In response to applicant's argument that Schadt has a layered structure and that the input polarizer (4) and the output polarizer (8) appear to be layers of the STN cell is irrelevant since the claim only recites that the optical component comprising a structured retarder, a circular polarizer and an external polarizer which is clearly shown

Art Unit: 2871

by Schadt. Further, the claim also fails to recite the structural relationship between each of them. Therefore, having Schadt available one of ordinary skill in the art would be able to make and use the invention as claimed.

It is also pointed out to applicant that Kameyama was used to find a teaching for using two circular polarizers made of cholesteric layers being arranged one above the other, one of which rotates to the left and the other of which rotates to the right.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

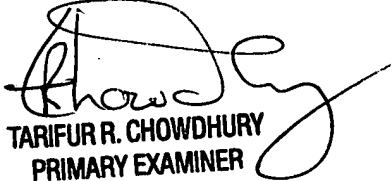
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tarifur R. Chowdhury whose telephone number is (571) 272-2287. The examiner can normally be reached on M-Th (6:30-5:00) Friday Off.

Art Unit: 2871

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (571) 272-2293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TRC
December 13, 2005


TARIFUR R. CHOWDHURY
PRIMARY EXAMINER